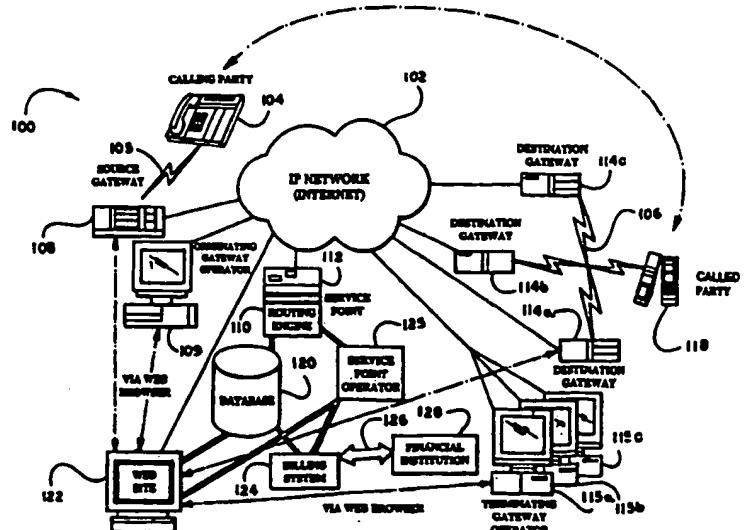




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : H04M 7/00, H04L 29/06	A3	(11) International Publication Number: WO 99/14931 (43) International Publication Date: 25 March 1999 (25.03.99)
<p>(21) International Application Number: PCT/US98/19254</p> <p>(22) International Filing Date: 16 September 1998 (16.09.98)</p> <p>(30) Priority Data: 60/059,087 16 September 1997 (16.09.97) US</p> <p>(71) Applicant: TRANSNEXUS, LLC [US/US]; Suite N-204, 430 Tenth Street, N.W., Atlanta, GA 30318 (US).</p> <p>(72) Inventors: DALTON, James, Pleasant, Gossett, Jr.; 3300 Wood Valley Drive Road, Atlanta, GA 30327 (US). DALTON, Alcina, de Figueiredo; 3300 Wood Valley Road, Atlanta, GA 30327 (US). THOMAS, Stephen, Anthony; 4397 Windsor Oaks Circle, Marietta, GA 30066 (US). COWN, Maria, Osterholt; 2854 Betula Drive, Austell, GA 30106 (US). VAUGHN, Rich, Carroll; 4383 Burnleigh Chase, Roswell, GA 30075 (US). SZCZERBINA, Pawel; 795 Hammond Drive #1604, Atlanta, GA 30328 (US). LOVETTE, Brian, Keith; 2540 Ingram Road, Duluth, GA 30136 (US).</p> <p>(74) Agents: PAVENTO, Michael, S. et al.; Jones & Askew, LLP, 37th floor, 191 Peachtree Street, N.E., Atlanta, GA 30303 (US).</p>		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
<p>Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 14 May 1999 (14.05.99)</p>		
<p>(54) Title: INTERNET TELEPHONY CALL ROUTING ENGINE</p> <p>(57) Abstract</p> <p>The present invention discloses a centralized routing engine that is able to assist gateways in making routing decisions for calls being placed in an IP network environment. Types of calls include voice, fax, video, etc. The routing engine provides significant flexibility to the gateways by allowing the gateways to designate preferences that define operational limits or requirements. A source gateway operator may set preferences such as the maximum price that is willing to be paid for a call, the maximum delay that will be tolerated and the maximum autonomous system hop count that will be tolerated. A destination gateway operator is likely only to be concerned with setting price schedules as preferences. Gateway operators may also set "preference criteria", which define the circumstances in which a certain set of preferences is to be applied. Based on preferences and preference criteria, the routing engine is able to locate destination gateways that are eligible to terminate a voice over telephony IP call. The routing engine provides a prioritized list of eligible destination gateways to the source gateway. The source gateway then works through the prioritized list and attempts to set up the voice over IP telephony call with each eligible destination gateway, until the call is established.</p>		



FOR THE PURPOSES OF INFORMATION ONLY

Codes used to identify States party to the PCT on the front pages of pamphlets publishing international applications under the PCT.

AL	Albania	ES	Spain	LS	Lesotho	SI	Slovenia
AM	Armenia	FI	Finland	LT	Lithuania	SK	Slovakia
AT	Austria	FR	France	LU	Luxembourg	SN	Senegal
AU	Australia	GA	Gabon	LV	Latvia	SZ	Swaziland
AZ	Azerbaijan	GB	United Kingdom	MC	Monaco	TD	Chad
BA	Bosnia and Herzegovina	GE	Georgia	MD	Republic of Moldova	TG	Togo
BB	Barbados	GH	Ghana	MG	Madagascar	TJ	Tajikistan
BE	Belgium	GN	Guinea	MK	The former Yugoslav Republic of Macedonia	TM	Turkmenistan
BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Icealand	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LJ	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/19254

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 6 H04M7/00 H04L29/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04M H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	WO 98 36543 A (TELIA AB PUBL ; ALMGREN GUNNAR (SE)) 20 August 1998 see the whole document ---	1-3, 23-25, 33
A	THOM G A: "H. 323: THE MULTIMEDIA COMMUNICATIONS STANDARD FOR LOCAL AREA NETWORKS" IEEE COMMUNICATIONS MAGAZINE, vol. 34, no. 12, December 1996, pages 52-56, XP000636454 see the whole document ---	1-49
A	RUDKIN S ET AL: "REAL-TIME APPLICATIONS ON THE INTERNET" BT TECHNOLOGY JOURNAL, vol. 15, no. 2, April 1997, pages 209-225, XP000703571 see the whole document ---	1-49
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

12 March 1999

23/03/1999

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3018

Authorized officer

Megalou, M

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 98/19254

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 434 848 A (GUN LEVENT ET AL) 18 July 1995 see abstract see figure 1 see column 3, line 20 - column 4, line 18 -----	1-49

INTERNATIONAL SEARCH REPORT

Information on patent family members

Int'l Application No

PCT/US 98/19254

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 9836543 A	20-08-1998	SE 9700516 A	15-08-1998
US 5434848 A	18-07-1995	NONE	